52060320

galaxis

EINSCHALTEN UND GUT

SCHEMATIC DIAGRAM

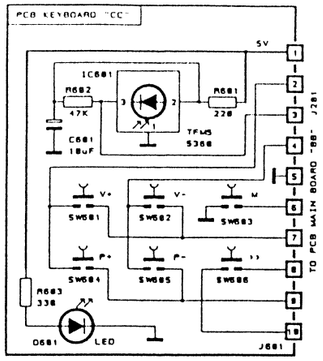
TESI 4 14" 21"

PAL

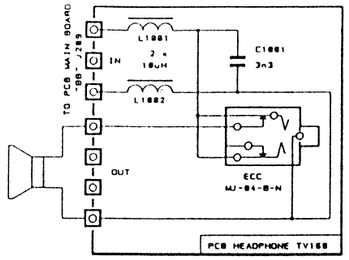
TECHNICAL DATES

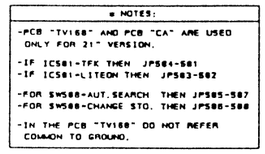
- POWER SUPPLY 220 Vac ±10% 50Hz
- CONSUMPTION 50Wh
- AUDIO OUTPUT IMPEDANCE 16 ohm
- OUTPUT AUDIO POWER 3W (for 14") 4W (for 21")
- INPUT ANTENNA IMPEDANCE 75 ohm COAXIAL
- I.F. SOUND FREQUENCY 33.4 Mhz
- INTERCARRIER SOUND 5.5 Mhz
- I.F. VIDEO CARRIER 38.9 Mhz
- I.F. COLOUR CARRIER 34.47 Mhz
- PICTURE TUBE 90°
- AUTOMATICAL DEMAGNETIZATION
- COMPLETELY AUTOMATICAL CIRCUIT COLOUR KILLER
- CHROME CIRCUIT WITH CRYSTAL AT STABILITY AT 4.43 Mhz

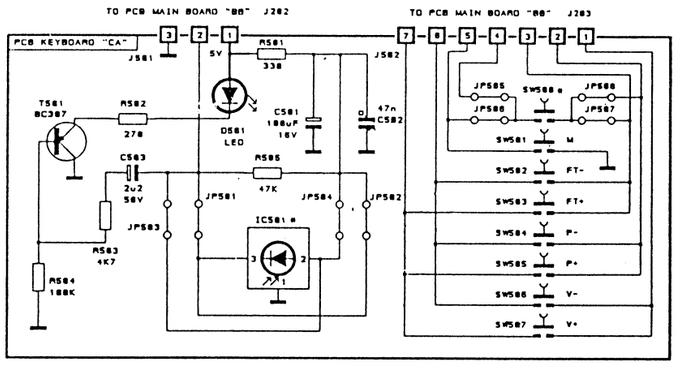
ULTRAVOX

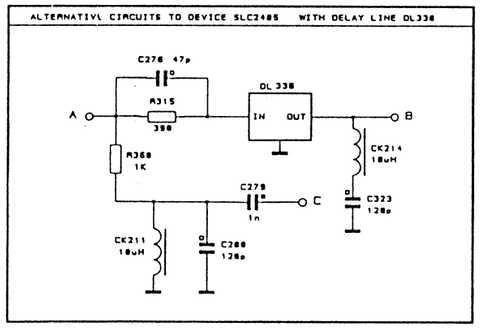


TS838388




* NOTES:
-PCB "TV168" AND PCB "CA" ARE USED ONLY FOR 21" VERSION.
-IF IC581=TFK THEN JP584-581
-IF IC581=LITEON THEN JP583-582
-FOR SW588=AUT.SEARCH THEN JP585-587
-FOR SW588=CHANGE STO. THEN JP586-588
-IN THE PCB "TV168" DO NOT REFER COMMON TO GROUND.





SM Power Supply
-Connect a digital voltmeter between the secondary mass and the cathode of the diode D212 (BYV95) with the brightness and contrast set at minimum.
-Adjust the Trimmer PT201 at 108V ±1V for 14" (113V ±1V for 21").

IF Video Calibration
-Apply to the issue I.F.of the Tuner (through a screened cable as in fig.1) a video signal with colour bars at 38,9 Mhz of amplitude 10mV.

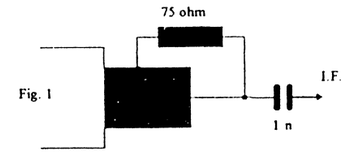


Fig. 1

LC201 Calibration (Demodulator).
-Connect a voltmeter (minimum 20Kohm/V-10Vfs) to the pin n° 2 of the Tuner (AGC).
-Rotate the Trimmer PT202 counterclockwise to have the maximum reading of the voltmeter.
-Rotate clockwise untill the indicator doesn't go down abruptly.
-Rotate the core of the bobbin LC201 for the minimum index indication; if it goes down to the 0 too, rotate PT202 again until you read about 3V and repeat the calibration of PT202 checking also the picture.
LC 203 Calibration (sound carrier trap).
-Connect the probe of the oscilloscope to pin n° 19 of the scart and make minimum the residue of audio on the video at the step before the synchro. Regulate by eye untill the residue of audio noise on the video disappears.
LC 202 Calibration (AFC).
-Connect the voltmeter to pin n° 9 of the microprocessor and rotate the core untill you reach the continuous voltage of 2,5V.
Identification control.
-Connect the volmeter to pin n° 34 of the microprocessor. Measure 5V with a syntonized station and 0V out station.

A.G.C. Calibration
-Apply to the antenna a signal of 1mV (60dB) with the best relation between noise and signal. Rotate the Trimmer PT202 counterclockwise.
-Connect a voltmeter (20Kohm/V-10Vfs) and rotate clockwise untill the tension indicated by voltmeter doesn't increase from the initial value (about 9V).

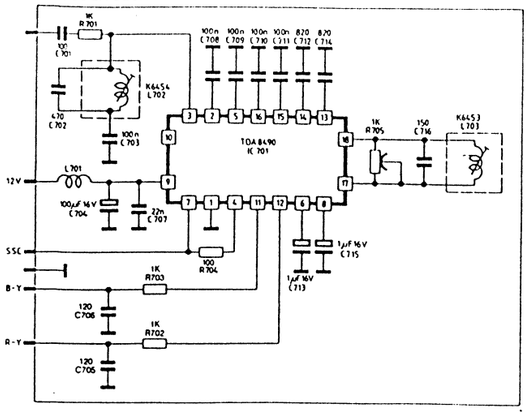
Crome Calibration
-Connect a generator of colour bars of 1mV to the antenna with burst of 75% and audio modulation with fixed note of L.F.
-Adjust the C288 Trimmer for the minimum sliding of colour.
-Adjust LC204 -PT203 for the minimum Hannover effect, observing as sample cyan and magenta colours.

R.G.B. Final Calibration
-Connect a signal with video modulation to the antenna (black screen).
-Adjust the brightness to the minimum (eventually reduce G2 if the screen should be enlightened too).
-Adjust R401-R402 (gains) half run with help of a voltmeter of 200V fond scale.
-Adjust R418 R419 R420 to obtain 160V on the respective cathodes.
-Change the video modulation of the generator of bar signals on the grey scale or on the colour scale eliminating the saturation.
-Bring brightness and saturation to the minimum and contrast to the maximum.
-Regolate G2 untill the four brighter bars of the grey scale are visible.
-Decrease the contrast untill only the bar on the left side is visible.
-Touch again R418 R419 R420 to obtain the best neutral grey of the visible bar.
-Bring back tha analogical levels to the medium value by means of the pulsing botton on the remote control.
-Eliminate the colour and touch again R419 R420 for the best white purity of the brighter bar.

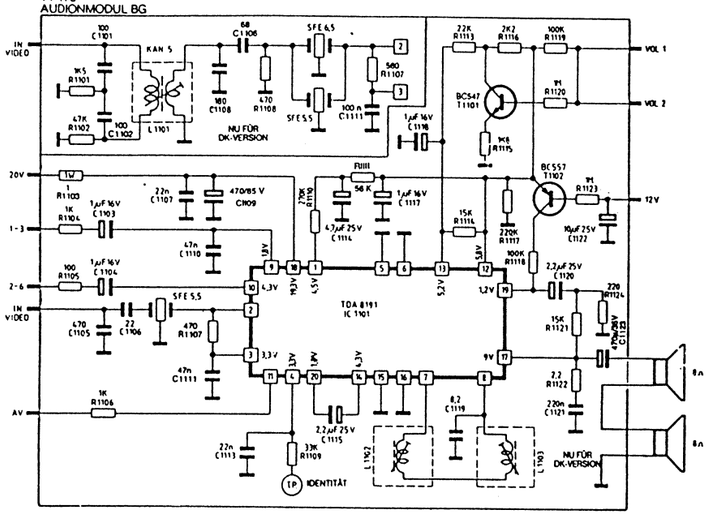
Geometry
-Syntonize the picture of reticul with the extreme bars of horizontal and verticle amplitude.
-Shortcircuit to ground the knot R432-R433 and regulate the Trimmer PT205 for the minimum sliding of horizontal frequency.
-Regolate the Trimmer PT206 for the best horizontal centering of the picture (if the last regulation consists to have a sensible displacement of the beginning position, repeat the regolation of horizontal frequency).

Verticle amplitude
-Adjust the Trimmer PT204 for the correct dimension of the vertical picture.

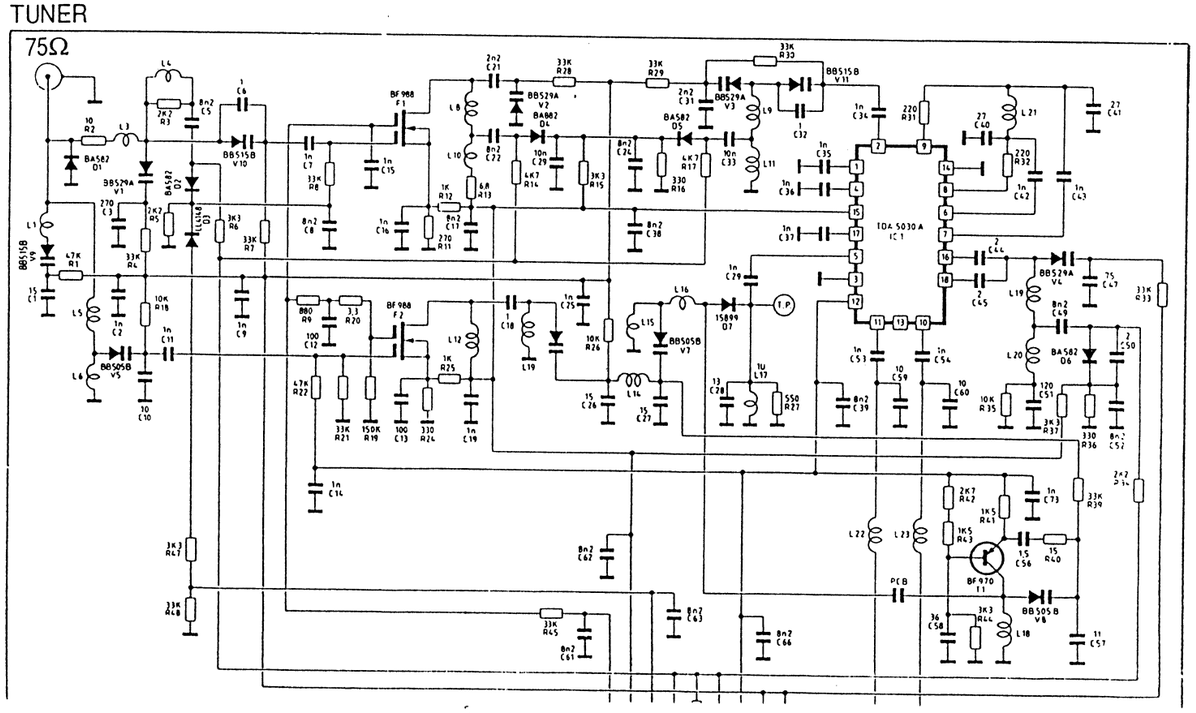
TV 148
DECODER SECAM



TV 175
AUDIONMODUL BG



TUNER
75Ω



galaxis
EINSCHALTEN UND GUT

TV 175
PCB TELEVIDEO

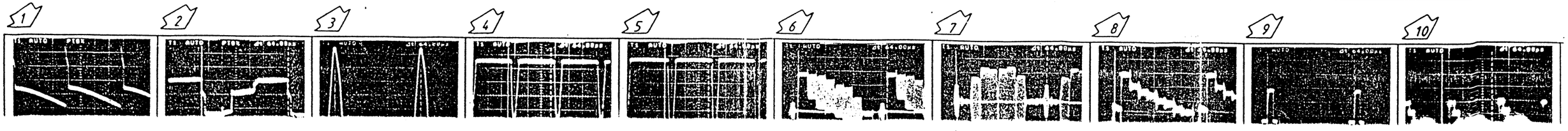
EUROSCART

EING. AUD. R 2
AUSGANG AUD. R 1
EING. AUD. L 6
AUSGANG AUD. L 3
8 KOMMUTATION LANGSAME
EINGANG B 7
EINGANG C 11
EINGANG R 15
16 BLK
AUSGANG VIDEO 19
20 EING. VIDEO

PCB ALLIMENTATOR
TV 190

* NUR IN SECAM-L VERSION MONTIEREN

HELLIGKEIT ..
SÄTTIGUNG ..
KONTRAST ..



TV 175
PCB TELEVIDEO

TV 175
AUDIONMODUL BG

KOPFHÖRERANSCHLUSS PCB
TV146

KINESKOP SOCKEL SA 000034

TV 119
EMPFÄNGER UND LOKALEN ANTRIEBEN

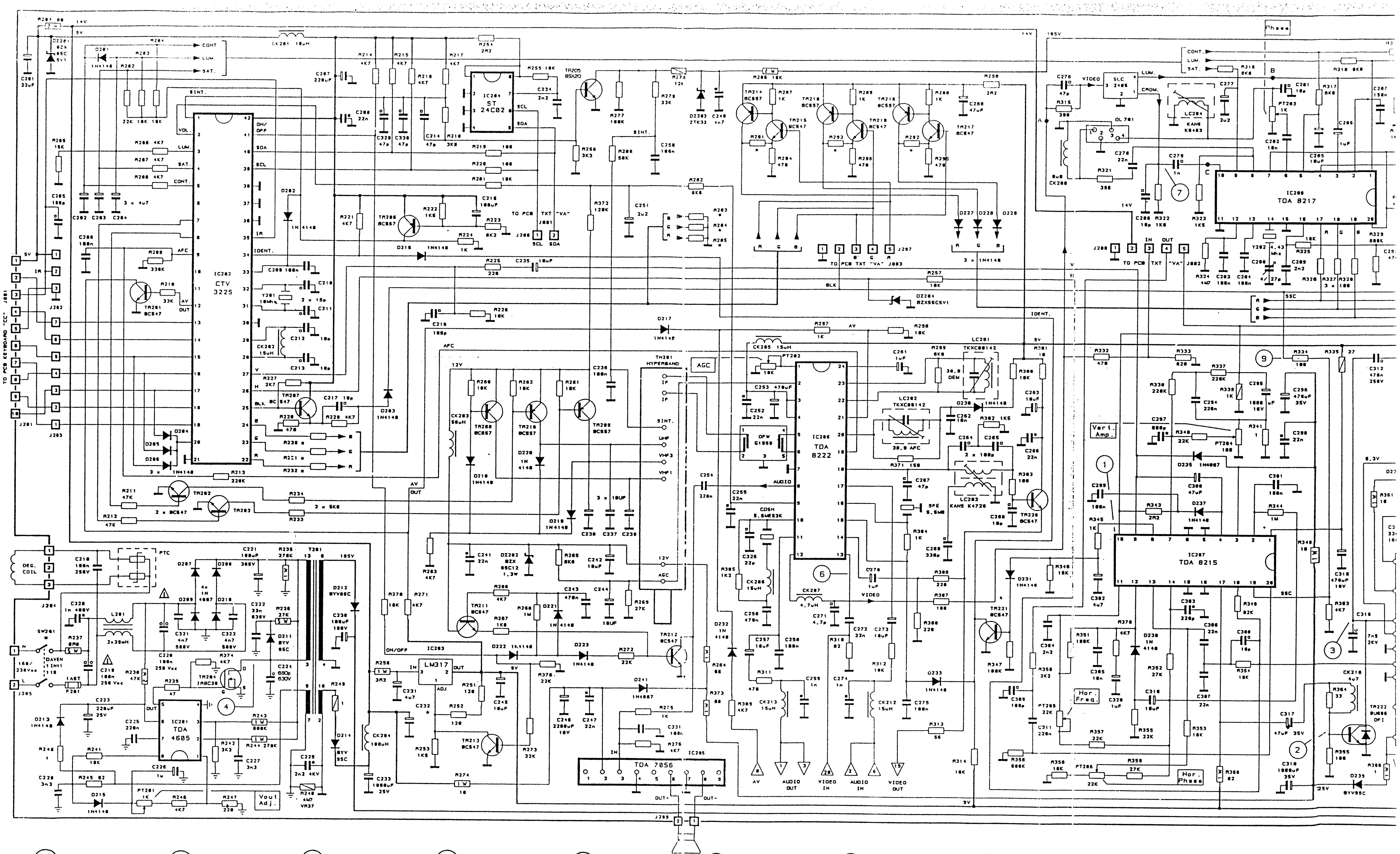
VERBINDUNG SECAM

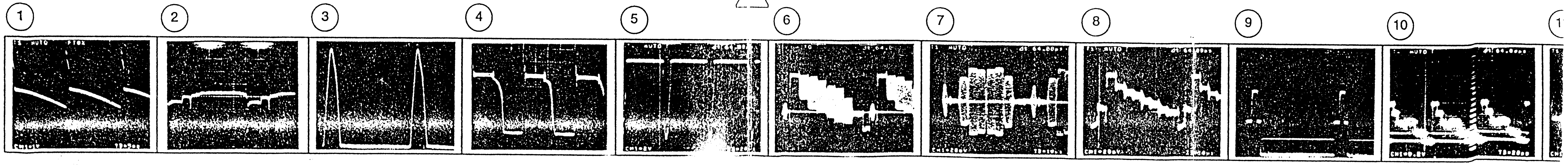
VERBINDUNG PER M.F.

VERBINDER N. 402
ENTMAGNETISIERUNG

CRT
14" - 16"
20" - 21"

6 7 8 9 10 11 12 13 14 15


IC202 CTV 322S
IC204 ST 24C02
IC206 TDA 8222
IC208 TDA 8217
IC207 TDA 8215
IC201 TDA 4605
IC203 LM317
IC205 TDA 7056
TN201 HYPERBAND
AGC
DEG. COIL
PTC
T201
TO PCB KEYBOARD "CC" J001
TO PCB TXT "VA" J001
TO PCB TXT "VA" J003
TO PCB TXT "VA" J002
SLC 2405
DL 701
LC204 KANS K0463
LC201 TKXC00142
LC202 TKXC00142
LC203 KANS K4726
OFW G1959
CDSH 5,5ME53K
SFE 5,5MB
Y201 10MHz
Y202 4,43 Mhz
Phase
Vert. Amp.
Hor. Freq.
Hor. Phase
Vout Adj.
AUDIO OUT
VIDEO IN
AUDIO IN
VIDEO OUT
AV
CONT.
LUM.
SAT.
IDENT.
SINT.
AFC
SSC
BLK
14V
5V
9V
12V
105V
25V
6,3V
160/230Vac


1
2
3
4
5
6
7
8
9
10

PCB MAIN BOARD "88"

PCB NECK BOARD "SA000034"

PCB TELETEXT "VA"

IC201 TDA 8217

IC206 TDA 8222

IC207 TDA 8215

IC881 SAA5244

A/V SCART

AUDIO IN R
AUDIO IN L
AV
VIDEO IN
AUDIO OUT R
AUDIO OUT L
VIDEO OUT
SCART CONNECTION

REF	14"	21"
R291 R292 R293	1 K2	1K5
R238 R231 R232	1 K5	1K8
R283 R284 R285	2K2	1K8
R315	Jumper	47K
R835	47	82
C232	1000 uF 15V	2200 uF 15V
T281	207 4 5263	2122 283+
T282	114 2.0995	1142 8455

- FOR 21" VERSION SWITCH IS OUTSIDE OF THE PCB.

WITH RESERVES OF MODIFICATIONS

6 7 8 9 10 11 12 13 14 15